IN THE CLAIMS

Please amend the claims as follows:

Claims 1-5 (Canceled).

Claim 6 (Currently Amended): A display device, comprising:

a pixel array unit having display elements formed in vicinity of intersections of signal lines and scanning lines arranged in length and breadth, image pickup units and an output unit which outputs binary data corresponding to image picked up by said image pickup unit;

a image pickup device provided separate from said image pickup unit;

a first image processing unit configured to generate multiple gradation data based on multiple binary data picked up by said image pickup units based on multiple image pickup conditions;

a second image processing unit configured to receive either the image pickup data picked up by said image pickup device or the multiple gradation data generated by said first image processing unit, to conduct a prescribed image processing;

a display controller IC which embeds said first image processing unit and supplies digital pixel data for said pixel array unit to said pixel array; [[and]]

a temporary storage capable of storing image pickup data of said image pickup unit for three horizontal lines[[,]]; and

a virtual image pickup display detector,

wherein said pixel array unit is formed on an insulation substrate using TFTs (Thin Film Transistors)[[;]], [[and]]

while said first image processing unit is transmitting the image pickup data stored in said temporary storage to said second image processing unit, the virtual image pickup data

detector calculates the central image pickup data, and transfers the calculation result to said temporary storage,

said first image processing unit is a semiconductor chip.

Claims 7-11 (Canceled).

Claim 12 (Previously Presented): The display device according to claim 6, wherein said virtual image pickup detector averages the four image pickup data, to calculate the central image data.

Claims 13-19 (Canceled).

Claim 20 (Previously Presented): A display device, comprising:

display devices in pixels formed in vicinity of intersections of signal lines and scanning lines disposed in length and breadth;

image pickup units, at least one of said image pickup units being provided corresponding to each pixel, and each conducting image pickup at a prescribed range;

binary data storages which store binary data corresponding to results of image picked up by said image pickup unit;

a multiple gradation data generator which generates multiple gradation data with first, second third colors based on the binary data with the first, second and third colors picked up by said image pickup unit; and

a color composition unit configured to generate image pickup data with a fourth color based on the multiple gradation data with the first, second and third colors,

wherein said first, second and third colors are colors except red color, and the fourth color is red.

Claim 21-22 (Canceled).

Claim 23 (Original): The display device according to claim 20, wherein the first color is white, the second color is green and said third color is blue, and

said color composition unit calculates the multiple gradation data with red color based on the multiple gradation data with white, green and blue.

Claim 24 (Original): The display device according to claim 20, further comprising a backlight device capable of alternately illuminating the lights with the first, second and third colors, said backlight device being disposed on back face of an insulation substrate on which said display elements and said image pickup units are provided,

wherein said image pickup unit repeatedly conducts image pickup with respect to the first, second and third colors of said backlight device.

Claim 25 (Original): The display device according to claim 20,

wherein said image pickup unit repeatedly picks up the image on multiple image pickup conditions with respect to the first, second and third colors of said backlight device; and

said image pickup unit repeatedly picks up image with respect to the cases where illumination color of said backlight are the first, second and third colors.

Claim 26 (Original): The display device according to claim 20, wherein each pixel is substantially square shape.

Claim 27 (Original): The display device according to claim 20, further comprising an averaging gradation estimation unit configured to estimate the averaging gradation of the whole display screen based on the binary data of the pixel data connected to a portion of the scanning lines which do not neighbor to each other and a portion of the signal lines which do not neighbor to each other.

Claim 28 (Original): The display device according to claim 20, further comprising:

a signal processing output circuit which converts the binary data for multiple pixels into serial data; and

an output determination unit configured to determine whether or not to output the image pickup data of the remaining image pickup unit from said signal processing output circuit based on the estimation result of said averaging gradation estimation unit.